defense. In June there was an induction of genes related to oxidation-reduction processes, oxidative stress, wounding, fatty acid synthesis and response to ABA. These pathways and gene functions are consistent with the molecular and cellular processes expected in the tissue and can provide useful tools for molecular breeding.

Tropical and Mediteranean Plants
Emeline RICCIUTI - Poster-P242

Abstract Title: INTEGRATED VIRUS AND INFECTION RISK: DOES THE BANANA STREAK VIRUS (BSV) THREAT THE BANANA CULTURE?

Primary Author(s) and Institution(s): Emeline RICCIUTI 1 , Delphine MASSE, Nathalie LABOUREAU, Bruno HOESTACHY 2 , Marie-Line ISKRA-CARUANA 1 1 CIRAD, UMR BGPI, F-34398 Montpellier, France. BGPI, Univ Montpellier, CIRAD, INRA, Montpellier SupAgro, Montpellier, France. 2 Laboratoire de la santé des végétaux, Station de la Réunion, Pôle de Protection des Plantes, Bât. CIRAD, Ligne Paradis, 7 chemin de l'IRAT, 97410 SAINT PIERRE

Abstract

Cultivated bananas mainly stem from intra- and interspecific crosses between two species: Musa acuminata (A genome) and Musa balbisiana (B genome). The B genome harbors viral sequences of Banana streak virus (BSV), inducing the banana streak disease and affecting growth and fruits production. The plantain is a natural hybrid (AAB) containing these integrations. BSV integrations can release functional virus following stresses, leading to spontaneous infections. However, no epidemic has been reported so far. We suspect the plantain to control this viral infection using a RNA silencing mechanism, resulting from the co-evolution between viral integrations and B genome. My PhD work aims to investigate BSV infections in plantain, from eBSV activation to complete recovery (qPCR, immunolabelling); as well as the defense mechanism set up by the host (Northern blot, NGS, in situ hybridization). I aim to propose a BSV infection evolution profile in plantain, to further test the virus transmission to a healthy plant. Indeed, other banana trees among which Cavendish cultivar (AAA, producing “dessert bananas”), without B genome, are extremely susceptible to BSV. The plantain culture intensification, associated with global changes, could threat the dessert bananas culture. My project will help answering this arising question of BSV epidemic risk.

Tropical and Mediteranean Plants
Anna Stavrinides - Poster-P243

Abstract Title: Comparative transcriptomic analysis of desiccation sensitivity in coffee seeds

Primary Author(s) and Institution(s): A.K. STAVRINIDES , M.-C. Combes, P. Lashermes, S. Dussert, T. Joët IRD, Université Montpellier, UMR DIADE, BP 64501, 34394 Montpellier, France

Abstract

Desiccation tolerant (DT) “orthodox” seeds can be stored over long periods of time in a dry quiescent state. In contrast, so-called “intermediate” seeds cannot survive complete drying and are short-lived. Work in our group (Dussert et al. 2018, JXB 69:1583-97) has recently shown that a transcriptional switch occurs during the late maturation program in intermediate Coffea arabica seeds, and includes similar